

Name:

Date:

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PART A In the space on the left, write the letter of the term or phrase which **best** completes the statement or answers the question (1 mark each).

- _____ 1. Non-living components of an ecosystem are called ...
a. decomposers
b. abiotic factors
c. elements
d. biotic factors
- _____ 2. All of the different species that interact in a specific ecosystem is called ...
a. an organism
b. a community
c. a biome
d. a population
- _____ 3. An interaction where one organism eats all or part of another organism is called ...
a. parasitism
b. mutualism
c. commensalism
d. predation
- _____ 4. Something that is critical in determining the types of organisms that can exist in an area is ...
a. dynamic equilibrium
b. a biotic factor
c. a symbiotic factor
d. a limiting factor
- _____ 5. Which of the following is the correct (from largest to smallest) biotic ecological hierarchy?
a. organism, population, community, ecosystem
b. population, community, organism, ecosystem
c. ecosystem, community, population, organism
d. ecosystem, organism, community, population,
- _____ 6. Which of the following is not an abiotic component of an ecosystem?
a. Fungi
b. Sunlight
c. Moisture
d. Temperature

- ___ 7. The place where an organism lives is called its ...
a. niche
b. habitat
c. community
d. population
- ___ 8. Decomposers provide soil with ...
a. plants
b. sunlight
c. heat
d. nutrients
- ___ 9. Herbivores occupy the ...
a. first trophic level
b. second trophic level
c. third trophic level
d. whole range of trophic levels
- ___ 10. The special role that an organism has in the ecosystem in which they live is called its ...
a. niche
b. habitat
c. community
d. population

PART B In the space provided mark each of the following as true or false. (1 mark each)

- ___ 1. On average, only 10% of the energy in one trophic level is passed on to the next trophic level.
- ___ 2. The process that converts solar energy into chemical energy is photosynthesis.
- ___ 3. Ocean currents are considered a biotic factor because they affect precipitation.
- ___ 4. Organisms between communities interact to obtain resources such as food, water or habitat.
- ___ 5. Biology is the branch of science dealing with interactions of organisms and their environment.
- ___ 6. Tapeworms are an example of a parasitic relationship.
- ___ 7. A community is a group of closely related organisms that can reproduce with one another.
- ___ 8. When prey populations decrease, the predator population will decrease soon after.
- ___ 9. Producers are also called autotrophs.
- ___ 10. Bees pollinating a flower is an example of commensalism.

PART C In the space provided, match each term or phrase with the best definition. (1 mark each)

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|---------------------|---|
| ___ 1. Mutualism | A. Also known as consumers. |
| ___ 2. Autotrophs | B. Relating to living parts of an environment. |
| ___ 3. Biotic | C. Relationship between two organisms in which both organisms benefit. |
| ___ 4. Biodiversity | D. Relationship in which one species benefits and another is harmed. |
| ___ 5. Commensalism | E. Relating to non-living parts of an environment. |
| ___ 6. Ecosystem | F. The amount of plant and animal life in an area. |
| ___ 7. Heterotrophs | G. Part of a biome in which abiotic and biotic components interact. |
| ___ 8. Detritivores | H. Also known as producers. |
| ___ 9. Parasitism | I. Consumers that feed on waste materials. |
| ___ 10. Abiotic | J. Relationship where one species benefits and the other is not harmed. |

PART D Each of the following questions requires a short answer.

1. What types of organisms are found at the first, second and third trophic levels ? (3 marks)

2. How do decomposers fit into the trophic levels and why are they so essential to an ecosystem? (3 marks)

3. How do omnivores fit into the trophic levels? (2 marks)

4. Name and describe the three types of symbiotic relationships. (6 marks)
5. Name three biotic factors that affect an ecosystem (3 marks)
6. How can parasites play a positive role in an ecosystem? Provide an example to support your answer (3 marks)